The Government Emergency Telecommunications Service (GETS)
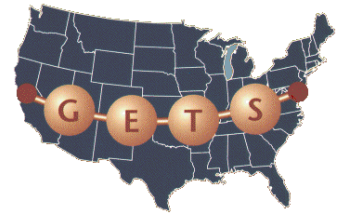
William E. Gleichsner

johnsonz@ncs.gov

National Communications System

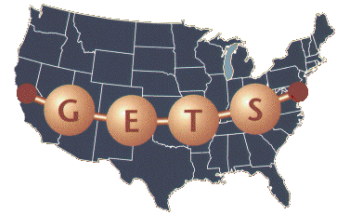*November 15, 2001*

Objective Of GETS

Provide Authorized Government Users With A Nationwide NS/EP Switched Voice And Voice Band Data Communications Service By Utilizing The Existing Public Switched Network (PSN) Resources Under A Full Range Of Conditions:

-- Crisis

-- Natural Disasters

-- All-Hazards

Why The PSN?

GETS Is Based On The PSN Because:

- 95 Percent Of Government Telecommunications Needs Are Met By The PSN

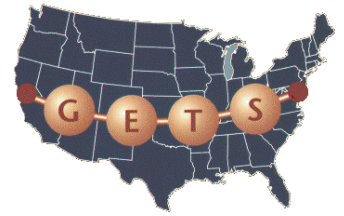- The PSN Is Ubiquitous, Robust, And Flexible

Therefore:

- GETS Provides *Improvements* In The PSN For NS/EP Telecommunications

- The PSN Will Provide For The Continuing Technical *Evolution* Of GETS
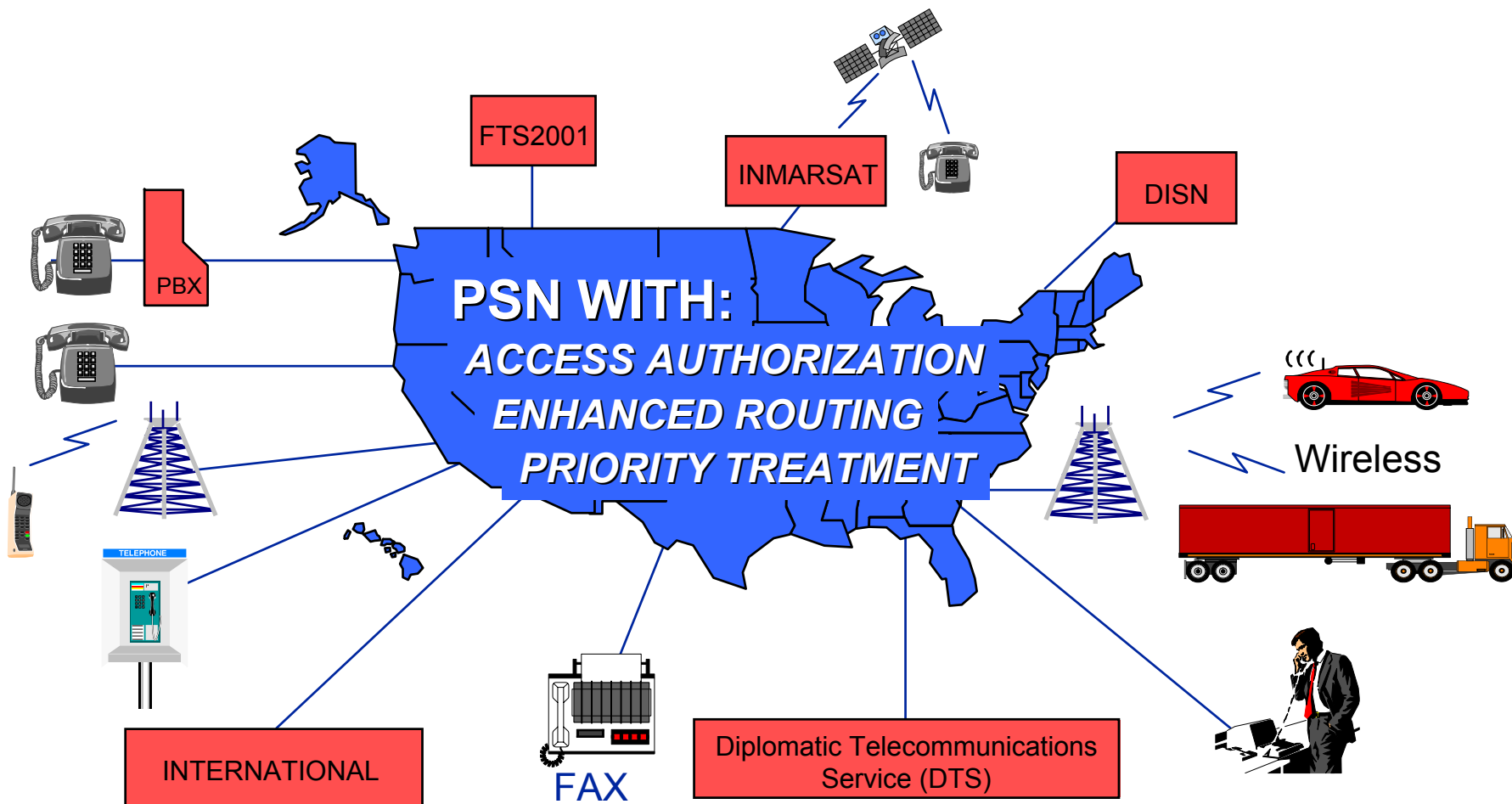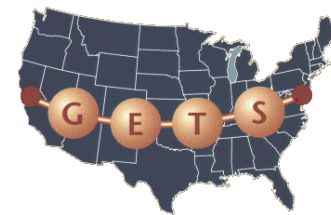
NS/EP Functional Requirements*

Voice Band Service

Voice Band Service To Support Presidential Communications, including NCS

Interoperability

Must Interoperate With Select Other Government Or Private Facilities, Systems And Networks

Survivability/ Endurability

Must Provide Interconnection Of Surviving Users Under Circumstances Ranging From Natural/Manmade Disasters Up To And Including Nuclear War

International Interface

Must Provide Access To And Egress From International Service

Nationwide Coverage

Must Provide Readily Available Nationwide Coverage To Support National Security Leadership And Inter/Intra Agency Emergency Communications

Intra/Interagency Operations

Common User Service Must Provide NS/EP Emergency Traffic With Priority Service

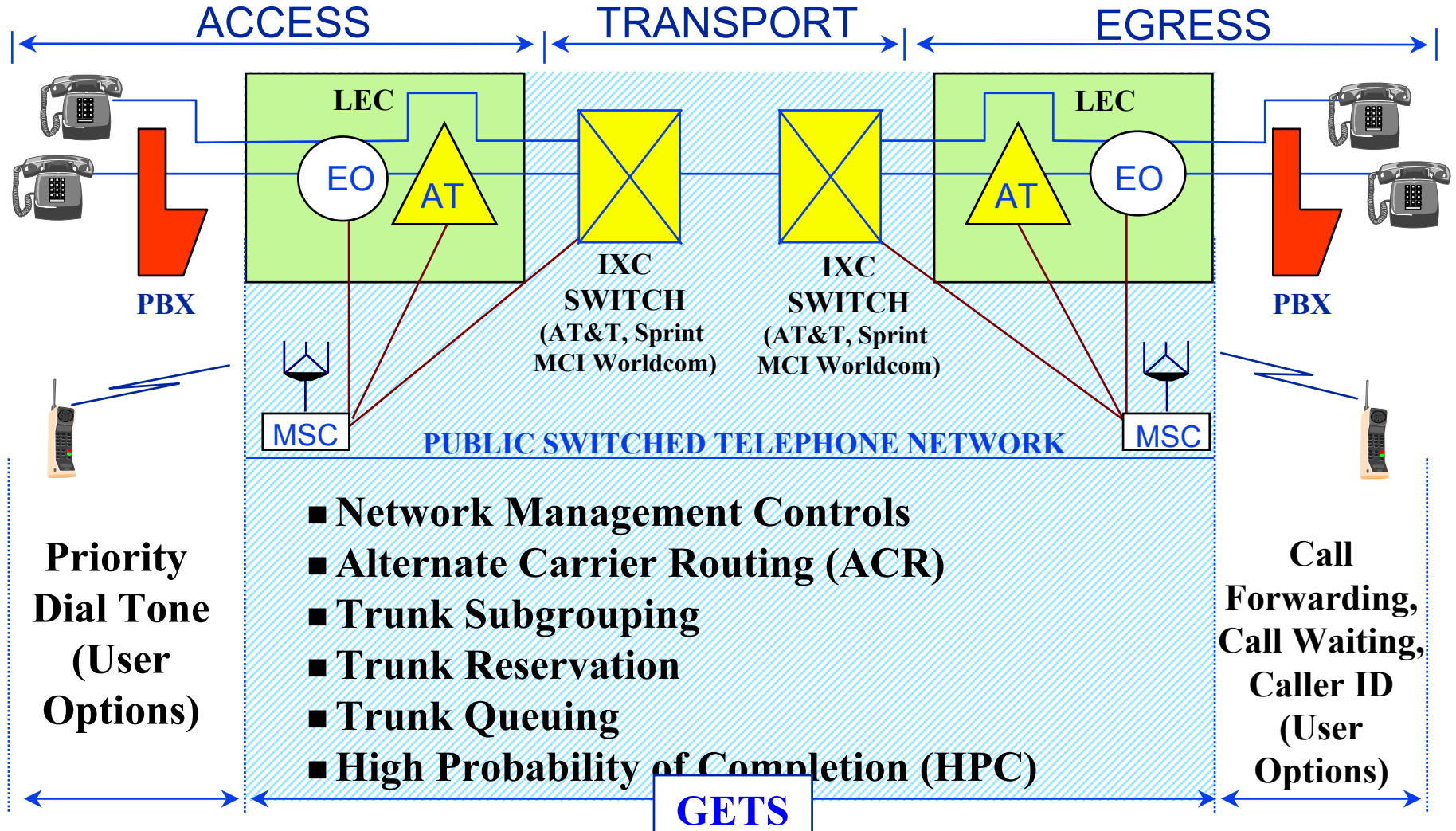* White House Memo 15 Oct 91 Revalidated NSDD-97 And E.O.s 12472 And 12656

Operational Concept

PSN WITH:
ACCESS AUTHORIZATION
ENHANCED ROUTING
PRIORITY TREATMENT

FTS2001

INMARSAT

DISN

PBX

Wireless

INTERNATIONAL

FAX

Diplomatic Telecommunications Service (DTS)

Priority Treatment Placement

ACCESS ⟷ **TRANSPORT** ⟷ **EGRESS**

LEC | LEC
EO | AT | IXC SWITCH (AT&T, Sprint MCI Worldcom) | IXC SWITCH (AT&T, Sprint MCI Worldcom) | AT | EO
PBX | PBX
MSC | MSC

PUBLIC SWITCHED TELEPHONE NETWORK

Priority Dial Tone (User Options)

- **Network Management Controls**
- **Alternate Carrier Routing (ACR)**
- **Trunk Subgrouping**
- **Trunk Reservation**
- **Trunk Queuing**
- **High Probability of Completion (HPC)**

Call Forwarding, Call Waiting, Caller ID (User Options)

GETS

POTS Routing

IXC AT&T .... IXC AT&T

IXC MCI WorldCom .... IXC MCI WorldCom

If Direct Path Blocked, EO Sends Call To Access Tandem

IXC Sprint .... IXC Sprint

AIN

AT

IXC OTHER .... IXC OTHER

AT

EO

End Office Sends Call to User's *Presubscribed Carrier* Via Direct Route, If Available
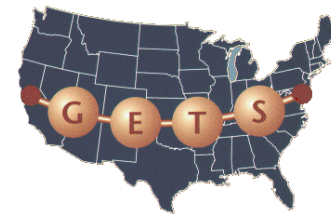
EO

USER DIALS 1-703-607-6101

"All Circuits Are Busy, Please Hang-up And Call Later"
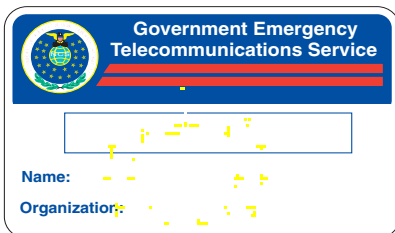
GETS Dialing Plan

NORTH AMERICAN NUMBERING PLAN		GETS DIALING PLAN	
PRESUBSCRIBED TO (AT&T, MCI WORLDCOM, OR SPRINT) **OR DIAL 1010222, 1010288, OR 1010333 TO DESIGNATE IXC** **OR FROM FTS** **OR FROM DTS** **OR FROM DISN**	**GETS UNIVERSAL ACCESS NUMBER 1-710-NCS-GETS (1-710-627-4387)**	**12 DIGIT PERSONAL IDENTIFICATION NUMBER (PIN)**	**10 DIGIT DESTINATION TELEPHONE NUMBER OR INTERNATIONAL DIALING**

1-710-NCS-GETS + PIN + Destination Number

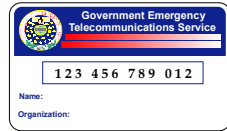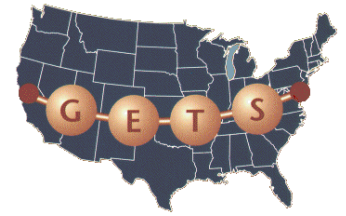**Government Emergency Telecommunications Service**

Name:

Organization:

703-607-6101

GETS Routing

Government Emergency Telecommunications Service

123 456 789 012

Name:
Organization:

Q

TONE -- Enter PIN   123456789012
"Please enter your destination number now"
703-607-6101   *"You are using GETS -- AT&T"*

NETWORK DAMAGE / CONGESTION ENCOUNTERED

**Enhanced Routing *and*
Priority Treatment**

GETS Call Processed

IXC AT&T		IXC AT&T

**Call in
IXC Queue**

**Call Passed
to IXC
Query AIN
Platform**

IXC MCIWorldcom	IXC MCIWorldcom

IXC Sprint	IXC Sprint

AIN

AT

IXC OTHER	IXC OTHER

AT

Call Queues on IXC Trunk Group
Call Queues on Direct Trunk Group
"Other" IXC calls

**Call in
AT Queue**

**Call ~~Queues on~~ Trunk Group
stopped at EO**

*Probability of GETS call completion
engineered for ~ .85 during 8X design
overload throughout entire PSN*

EO
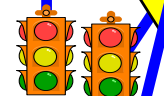
**User Dials
1-710-NCS-GETS**

**Routing Instructions For
Alternate Carrier Routing (ACR)**

EO

CALL CONNECTED!

STOP
STOP
STOP

GETS Card (Front)

Government Emergency Telecommunications Service

1 2 3   4 5 6   7 8 9   0 1 2

Name: Zachary L. Johnson

Organization: OMNCS - N2

GETS Card (Back)

TO MAKE GETS CALLS
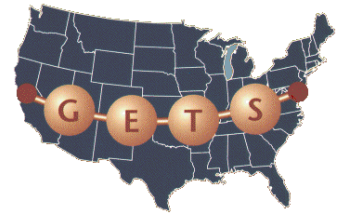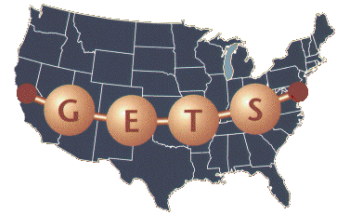
TOUCH-TONE PHONES

Dial **1 + 710-NCS-GETS (627-4387)**
After the tone enter your PIN. When prompted, dial your destination number (Area Code + Telephone Number).

CANNOT COMPLETE

For AT&T: 1+888-288-4387
For MCI WorldCom: 1+800-900-4387
For Sprint: 1+800-257-8383

Try a different long-distance carrier by dialing:
For AT&T: **1010+288**
For MCIW: **1010+222** } **+1+710-627-4387**
For Sprint: **1010+333**

FTS OR DSN USERS

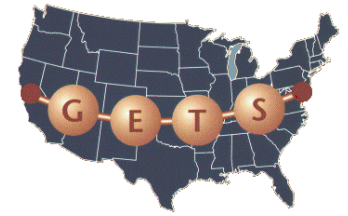Use normal procedures to get an FTS2000 dial tone, then dial **710-627-4387**

NEED ASSISTANCE?

Dial **1+800-818-GETS (4387)** to get help or report trouble at any time. You can also obtain user assistance through GETS. When prompted for your destination number dial **703-818-GETS.**

GETS POC Form

GETS POC FORM

DATE _____ DD/MM/YYYY   **ORG**[1] _____

PRIMARY

NAME   FIRST   MIDDLE   LAST

SUB ORG[2]   **PASSWORD**[3] ☐☐☐☐☐☐☐☐☐

(MAX 25 CHARACTERS FOR PIN CARD)

TITLE   E-MAIL ADDRESS

ADDRESS   WORK LOCATION   MAILSTOP

CITY   STATE   ZIP CODE

PHONE NUMBERS   ( ) PRIMARY   ( ) SECONDARY   ( ) CELLULAR

( ) AFTER HOURS   ( ) PAGER   PIN   ( ) FAX

Check each category that applies to your National Security / Emergency Preparedness mission(s). Criteria for each category can be found on the accompanying page.

☐ (1) National Security Leadership   ☐ (3) Public Health, Safety, and Maintenance of Law and Order   ☐ (5) Disaster Recovery

☐ (2) National Security Posture and US Population Attack Warning   ☐ (4) Public Welfare and Maintenance of the National Economic Posture

ALTERNATE

NAME   FIRST   MIDDLE   LAST

SUB ORG[2]   **PASSWORD**[3] ☐☐☐☐☐☐☐☐☐

(MAX 25 CHARACTERS FOR PIN CARD)

TITLE   E-MAIL ADDRESS

ADDRESS   WORK LOCATION   MAILSTOP

CITY   STATE   ZIP CODE

PHONE NUMBERS   ( ) PRIMARY   ( ) SECONDARY   ( ) CELLULAR

AFTER HOURS   PAGER   PIN   ( ) FAX

SENIOR POC _____   **INTERNATIONAL CALLING**   ☐ YES   ☐ NO

Forward to: **GETS Administrator**   **Tel (703) 607-6118**
OMNCS-N2 (N2)   **Fax (888) 862-4222**
701 S. Court House Road
Arlington, VA 22204-2198

(1) Enter ORGANIZATION (e.g. DOD, GSA, FEMA, ARC, UT-S)
(2) Enter SUB ORGANIZATION name (max. 25 characters)
(3) Enter 4 to 9 character Alphanumeric PASSWORD

GETS User Form

GETS USER FORM

DATE _____
DD/MM/YYYY

ORG(1) _____

Field	
NAME	_____
	FIRST MIDDLE LAST
SUB ORG(2)	_____ **PASSWORD**(3)
	(MAX 25 CHARACTERS FOR PIN CARD)
TITLE	_____ **STOCKPILE PIN CARD QUANTITY**
ADDRESS	_____
	WORK LOCATION MAILSTOP E-MAIL
	_____
	CITY STATE ZIP CODE
PHONE NUMBERS	(___) _____ (___) _____ (___) _____
	PRIMARY SECONDARY CELLULAR
	(___) _____ (___) _____
	AFTER HOURS PAGER PIN

POC NAME _____

INTERNATIONAL CALLING ☐ YES ☐ NO

Check each category that applies to your NS/EP mission(s). Criteria for each category can be found on the accompanying page.

☐ (1) National Security Leadership

☐ (2) National Security Posture and US Population Attack Warning

☐ (3) Public Health, Safety, and Maintenance of Law and Order

☐ (4) Public Welfare and Maintenance of the National Economic Posture

☐ (5) Disaster Recovery

(1) Enter ORGANIZATION (e.g. DOD, GSA, FEMA, ARC, UT-S)
(2) Enter SUB ORGANIZATION name (max. 25 characters)
(3) Enter 4 to 9 character Alphanumeric PASSWORD

Forward to: GETS Administrator   Tel (703) 607-6118
          OMNCS-N2   Fax (888) 862-4222
          701 S. Court House Road
          Arlington, VA 22204-2198

NS/EP Mission Criteria
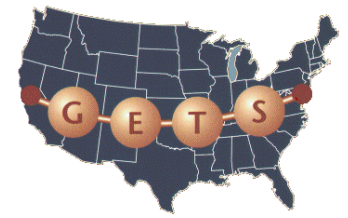
(A) National Security Leadership

This user performs NS/EP functions essential to national survival when nuclear attacks threatens or occurs. In addition, this user provides support to critical orderwire and control services necessary to ensure the rapid and efficient provisioning or restoration of other NS/EP services. These user functions may include the following:

1. Critical orderwire or control service supporting other NS/EP functions
2. Presidential support critical to continuity of Government and national security leadership
3. National Command Authority support for military command and control critical to national survival
4. Intelligence critical to warning of potentially catastrophic attack
5. Support for the conduct of diplomatic negotiations critical to arresting or limiting hostilities

(B) National Security Posture and US Population Attack Warning

This user type performs additional NS/EP functions essential to maintaining an optimum defense, diplomatic, or continuity of government posture before, during, and after crisis situations. Such situations are those ranging from national emergencies to international crises, including nuclear attack. These user functions may include the following:

1. Threat assessment and attack warning
2. Conduct of diplomacy
3. Collection, processing, and dissemination of intelligence
4. Command and control of military forces
5. Military mobilization
6. Continuity of Federal Government before, during, and after crisis situations
7. Continuity of state and local government functions supporting the Federal Government during and after national emergencies
8. Recovery of critical national functions after crisis situations
9. National space operations

(C) Public Health, Safety, and Maintenance of Law and Order

The user type performs NS/EP functions necessary for giving civil alert to the US population by maintaining law and order and the health and safety of the US population in times of national, regional, or serious local emergency. These user functions may include the following:

1. Population warning (other than attack warning)
2. Law enforcement
3. Continuity of critical state and local government functions (other than support of the Federal Government during and after national emergencies)
4. Hospitals and distribution of medical supplies
5. Critical logistic functions and public utility services
6. Civil air traffic control
7. Military assistance to civil authorities
8. Defense and protection of critical industrial facilities
9. Critical weather services
10. Transportation to accomplish foregoing NS/EP functions

(D) Public Welfare and Maintenance of National Economic Posture

This user type performs NS/EP functions necessary for maintaining the public welfare and national economic posture during any national or regional emergency. These user functions may include the following:

1. Distribution of food and other essential supplies
2. Maintenance of national monetary, credit, and financial systems
3. Maintenance of price, wage, rent, and salary stabilization, and consumer rationing programs
4. Control of production and distribution of strategic materials and energy supplies
5. Prevention and control of environmental hazards or damage
6. Transportation to accomplish the foregoing NS/EP functions

(E) Disaster Recovery

This user type performs NS/EP functions of managing a variety of recovery operations after the initial response has been accomplished. These user functions may include the following:

1. Managing medical resources such as supplies, personnel, or patients in medical facilities
2. Other activities such as coordination to establish and stock shelters, to obtain detailed damage assessments, or to support key disaster field office personnel may be included. Examples of those eligible include:
   - Medical recovery operations leadership
   - Detailed damage assessment leadership
   - Disaster shelter coordination and management
   - Critical Disaster Field Office support personnel

Available Information And Documentation
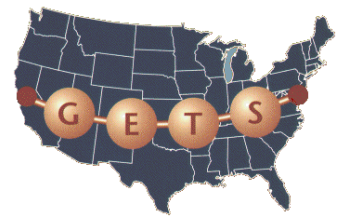
- **GETS Brochure**
- **GETS User Guides**
- **NCS Notice On Usage Billing**
- **GETS Planning Guide**
- **GETS Video**
- **GETS Home Page http://gets.ncs.gov**
- **GETS Booth**

GETS Video

http://gets.ncs.gov

Notice 2-3-1 Usage Billing

Pocket Guide

GETS Planning Guide

Wallet Guide

GETS Brochure
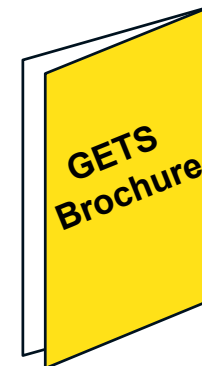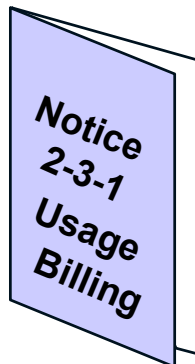
GETS Web-based Information Delivery Service

Coming Soon !

to

http://gets.ncs.gov

G-WIDS

(a limited capability

is currently available)

Telecommunications Daily

Thursday, January 7, 1999

25 Cents

GETS WORKS!

Operational Since 1995 **Over 50,000 PINs** **User Successes**

Nisqually Earthquake

Hurricane Fran

Hurricane Bertha

Alaskan Wildfires

Hurricanes

Bonnie & Georges

Kobe Earthquake

Reno Floods

Oregon Floods

Typhoon Keith

Hurricane Opal

Korean Airline Crash

Oklahoma City

Super Typhoon Paka

Sept. 11 Attacks

THE GOVERNMENT EMERGENCY TELECOMMUNICATIONS SERVICE (GETS)

Government Emergency Telecommunications Service (GETS) is a new service offered by the Office of the [Manager, National] Communications System (OMNCS) to meet [the national security] and emergency p[reparedness] requirements for the use of public, dedicated [networks] [between] Government [agencies] and other authorized [users in] response to White House tas[ks and] [emer]gencies. It uses specialized [features] of local and long-distance telephone network. GETS is accessed through a simple dialing plan and personal identification number (PIN).

THE GETS CONCEPT IS DEVELOPED BY USING COMMERCIAL TECHNOLOGY

Economic pressures and technical advances have made telephone systems increasingly more vulnerable to disruptions by natural or man-made disasters. Recent [examples] [show] power failures, cable cuts, and software problems can cripple the telephone service of entire regions. Congestion in the public switched network (PSN) such as the well-documented "Mother's Day" phenomenon, can also prevent circuits from being a[vailable.] GETS [must be] maintained in a constant state of readiness to make maximum use of all ava[ilable]

HOW THE NETWORK SUPPORTS GETS EVEN IN DAMAGED OR CONGESTED NETWORKS

The tremendous growth in the telecommunications industry has enabled Government users to expand services at reduced costs. In turn, this increased [our] reliance [on them and] has been accom[panied by a greater] vulnerability to a v[ariety of threats to the] viability and tec[hnical integrity of those] nodes. As our [telecommunications] nationwide networks, hig[hly dependent on] intelligen[t nodes and software-based] systems, [utilize] [the single fiber] optic cable or t[ransmission path, a failure] can disrupt thousands of [calls] for hours or days. GETS provides [a reliable] means to overcome network outa[ges using the] following key features.
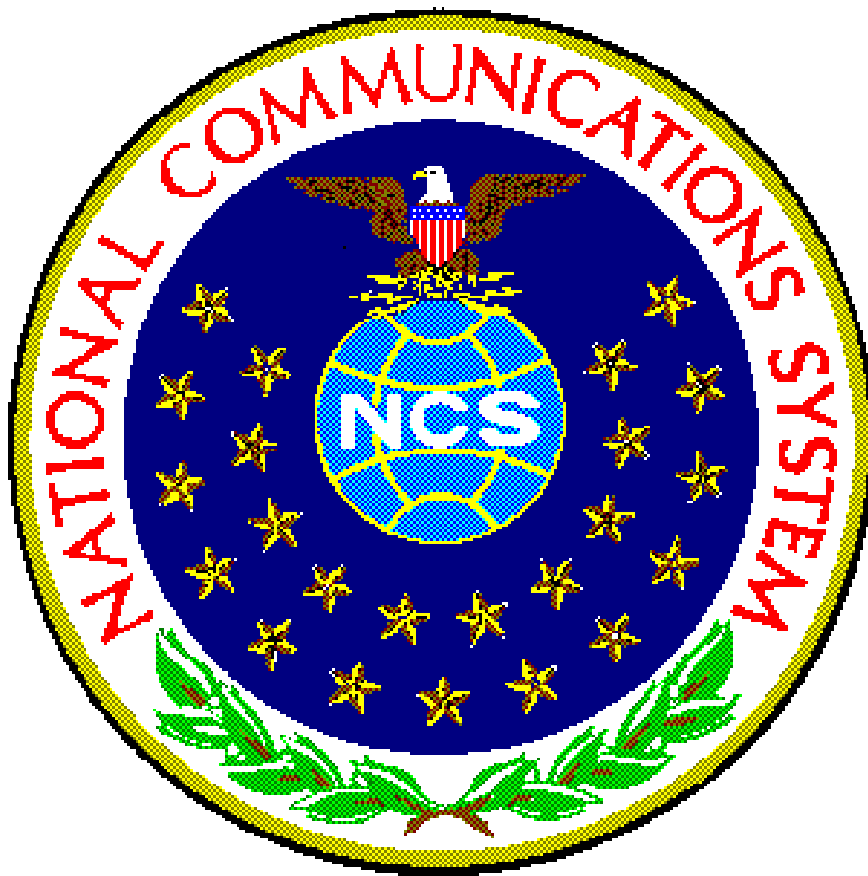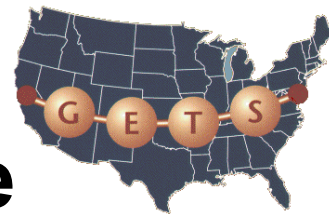
DIALING PLAN

The dialing [plan] is based on the 710 area code that is reserved for NS/EP use. This area code is valid [in] the IECs and all LECs, cellular carriers, and foreign carriers. The normal access mode is through your presubscribed long-distance carrier by dialing the universal access number. If this is not successful, [alternate] long-distance access

ACCESS CONTROL USING PINS

GETS has been designed to ensure that only authori[zed] [users can access the service] through the distribution, use, and control of PINs. The GETS user will be provided with a unique PIN that must [be used to] access the service. After the universal [access number] has been dialed, the GETS user will [be prompted] to enter a PIN and destination [number. If the PI]N is valid, the call will be processed. If [it is inv]alid (for example, if you entered it inc[orrectly], you will be prompted to reenter the PIN. If [the] PIN, after three attempts, is again determined to be inval[i]d, the call will be disconne[ct]ed.

If the access control syste[m f]ails, the call *will* be processed and allowed [to complete. P]INs can be dea[ctivated] for frau[d.]

ENHANCED ROUTING

LEC, cellular, and foreign carriers will route 710 calls to one of the three IECs. AT&T has implemented an enhanced routing service for 710 [c]alls in [their] network. Enhanced routing services for MCI, Sprint, and the LECs are

Government Emergency Telecommunications Service

QUESTIONS